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model 2200

Stereophonic Receiver

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INTRODUCTION

This service manual was prepared for use by Authorized Warranty Stations and contains service information for Marantz Model 2200 Stereophonic Receiver.

Servicing information and voltage data included in this manual are intended for use by the knowledgeable and experienced technician only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of the operation of the receiver.

The parts list furnishes information by which replacement parts may be ordered from the Marantz Company. A simple description is included for parts which can usually be obtained through local suppliers.

1. P.W. Board

As can be seen from the circuit diagram, the chassis of Model 2200 consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. FM/AM Tuner	mounted on P.W. Board P100
2. Phono Amplifier	mounted on P.W. Board P400
3. Power Amplifier	mounted on P.W. Board P700
4. Power Supply	mounted on P.W. Board P800
5. Dial Lamp	mounted on P.W. Board PZ01
6. Monitor, Switch	
7. Muting, Switch	
8. Tone Amplifier	mounted on P.W. Board PE01

Test Equipment Required for Servicing
 Table 1 lists the test equipment required for servicing the Model 2200 Receiver.

Item	Manufacturer and Model No.	Use
AM Signal Generator		Signal source for AM alignment.
Test Loop		Used with AM signal generator.
FM Signal Generator	Less than 0.3% distortion	Signal source for FM alignment.
Stereo Modulator	Less than 0.3% distortion	Stereo separation alignment and trouble shooting.
Frequency Counter		MPX oscillator adjustment (VCO).
Audio Oscillator	Weston Model CVO-100P, less than 0.02% residual distortion is required.	Sinewave and squarewave signal source.
Oscilloscope	High sensitivity with DC horizontal and vertical amplifiers.	Waveform analysis and trouble shooting, and ASO alignment.
VTVM	With AC, DC, RF range	Voltage measurements.
Circuit Tester		Trouble shooting.
AC Wattmeter	Simpson, Model 390	Monitors primary power to amplifier.
AC Ammeter	Commercial Grade (1-10A)	Monitors amplifier output under short circuit condition.
Line Voltmeter	Commercial Grade (0-150VAC)	Monitors potential of primary power to amplifier.
Variable Autotransformer (0-140VAC, 10 amps.)	Powerstat, Model 116B	Adjusts level of primary power to amplifier.
Shorting Plug	Use phono plug with 600 ohm across center pin and shell.	Shorts amplifier input to eliminate noise pickup.
Output Load (8 ohms, 0.5%, 100W)	Commercial Grade	Provides 8-ohm load for amplifier output termination.
Output Load (4 ohms, 0.5%, 100W)	Commercial Grade	Provides 4-ohm load for amplifier output termination.

Table 1. Test Equipment Required for Servicing



3. AM Alignment Procedure

3.1 AM IF Alignment

- 1. Connect a sweep generator to the test point A or J105 and an alignment scope to J112.
- 2. Rotate each core of IF transformer L203 and L204 for maximum height and flat top symmetrical response.

3.2 AM Frequency Range and Tracking Alignment

- 1. Set AM signal generator to 525 kHz. Turn the tuning capacitor fully closed (place the tuning pointer at the low end) and adjust the oscillator coil L202 for maximum audio output.
- 2. Set the signal generator to 1650 kHz. Place the tuning pointer in the high frequency end and adjust the oscillator trimmer on the oscillator tuning capacitor (CA-2) for maximum audio output.
- 3. Repeat steps 1 and 2 until nofurther adjustment is necessary.
- 4. Set the generator 600 kHz and tune the receiver to the same frequency and adjust a slug core of AM ferrite antenna for maximum output.
- 5. Set the generator to 1400 kHz and tune the receiver to the same frequency and adjust the trimming capacitors of Antenna (CA-1) for maximum output.
- 6. Repeat steps 4 and 5 until no further adjustment is necessary.

Note: During tracking alignment reduce the signal generator output as necessary to avoid AGC action.

4. FM Alignment Procedure

- 1. Connect an FM signal generator to the FM antenna terminals and an oscilloscope and an audio distortion analyzer to the tape output jacks on the rear panel.
- 2. Set the FM SG to 87.5 MHz and provide about 3 to 5 μ V. Place the tuning pointer at the low frequency end by rotating the tuning knob and adjust the core of oscillator coil L103 to obtain maximum audio output.
- 3. Set the FM SG to 108.5 MHz and provide about 3 to 5 μ V output. Rotate the tuning knob and place the tuning pointer at the high frequency end and adjust the trimming capacitor CF-3 for maximum output.
- 4. Repeat steps 2 and 3 until no further adjustment is necessary.
- 5. Set the FM SG to 90 MHz and tune the receiver to the same frequency. Decrease signal generator output until the audio output level decreases with the decreasing generator output. Adjust the antenna coil L101, RF coil L102 and IF transformer L105 for minimum audio distortion.
- 6. Set the FM SG to 106 MHz and tune the receiver to the same frequency. Adjust the trimming capacitor CF-1, CF-2 for minimum distortion.
- 7. Repeat steps 5 and 6 until no further adjustment is necessary. /.
- 8. Connect a DC VTVM with ±0.5 volt range selected to the test point (E) (J116) and adjust the secondary core (upper) of discriminator transformer L106 so that no voltage reading is obtained on the VTVM at no signal.

Next set the FM SG to 98 MHz and increase the output level to 1 k μ V, then tune the receiver to the same frequency so that no deflection is obtained.

Adjust primary core (bottom) of L106 for minimum distortion, and adjust the L107 for the maximum reading on the VTVM connected to the J114.

5. STEREO Separation Alignment

- 1. Set the FM SG to provide 1 $k\mu V$ at 98 MHz.
 - Tune the receiver to the same frequency perfectly.
- 2. Turn the FM SG modulation off (with the pilot signal turned off), connect a frequency counter to test point J120, and adjust R302 so that the frequency counter may precisely read 19 kHz.
- 3. Modulate the FM SG with stereo composite signal consisting of only subchannel signal (of course a pilot signal must be included).
- 4. Adjust the trimming resistor R301 for maximum and same separation in both channels.

6. Muting Circuit Alignment

Set the FM SG output to provide 25 μV (IHF) at 98 MHz and tune the receiver to the same frequency.

Adjust the trimming resistor R161 for the threshold level of 25 μ V (during this adjustment turn the MUTING pushswitch "on").

7. Audio Adjustment

Connect a VTVM across the resistor R735 and adjust the trimming resistor R727 until the VTVM reads 10.0 mV DC.

For the other channel connect the VTVM across the R736 and adjust the R728 for the same reading.

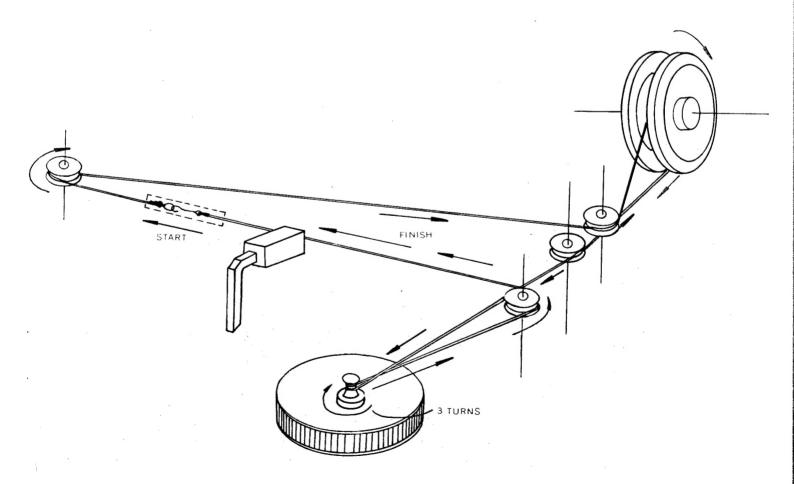


Figure 1. Dial Stringing





Figure 2. Front Panel Adjustment and Component Locations

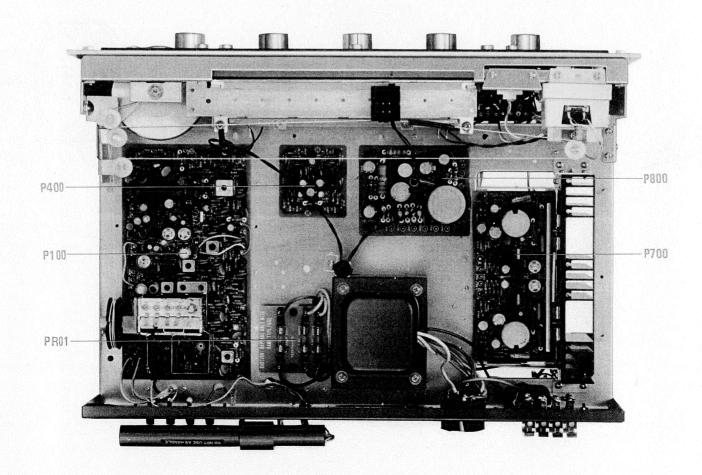


Figure 3. Main Chassis Component Locations (Top View)

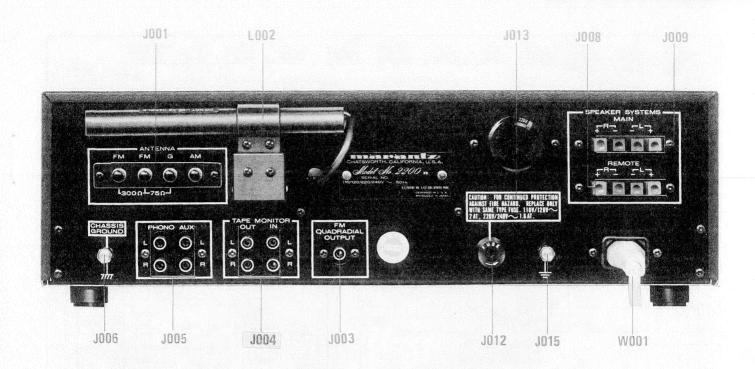


Figure 4. Rear Panel Adjustment and Facilities Locations

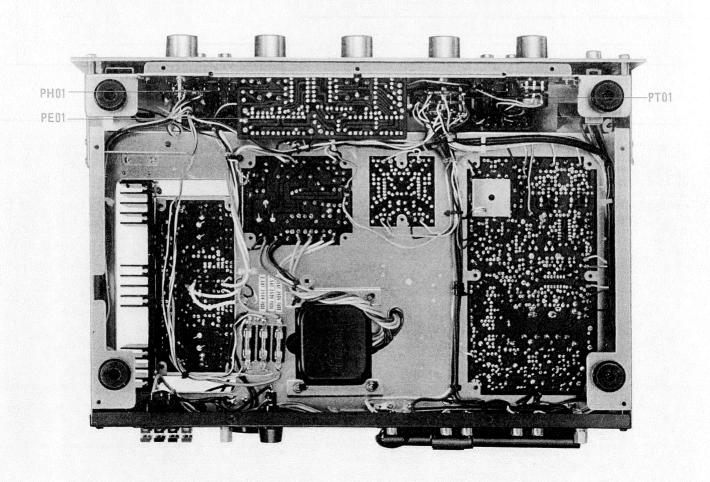


Figure 5. Main Chassis Component Locations (Bottom View)



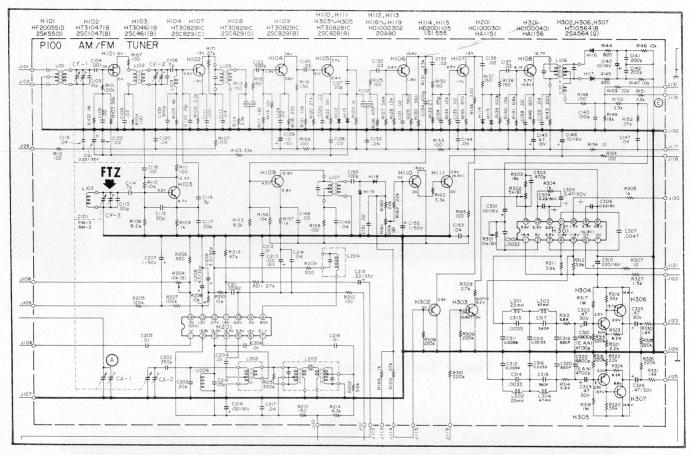


Figure 6. FM/AM Tuner Assembly (P100) Schematic Diagram

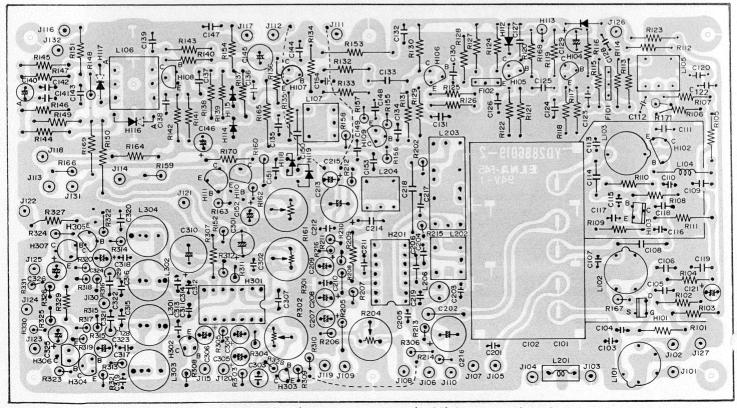


Figure 7. FM/AM Tuner Assembly (P100) Component Locations

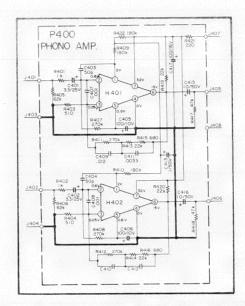


Figure 8. EQ Amplifier (P400) Schematic Diagram

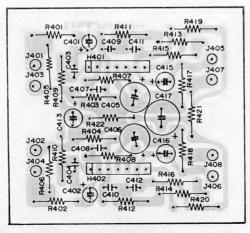


Figure 9. EQ Amplifier (P400) Component Locations



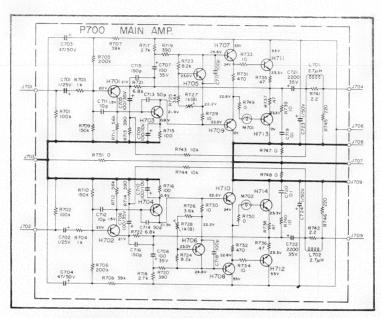


Figure 10. Main Amplifier (P700) Schematic Diagram

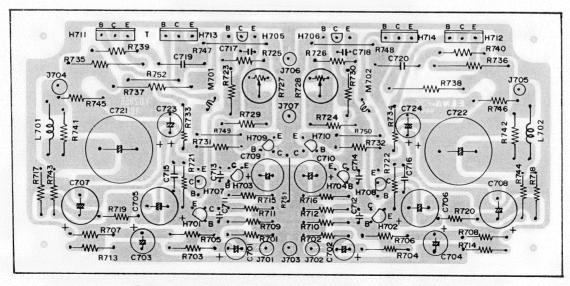


Figure 11. Main Amplifier (P700) Component Locations

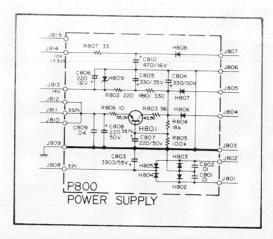


Figure 12. Power Supply Assembly (P800) Schematic Diagram

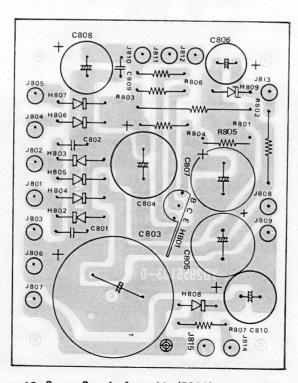


Figure 13. Power Supply Assembly (P800) Component Locations



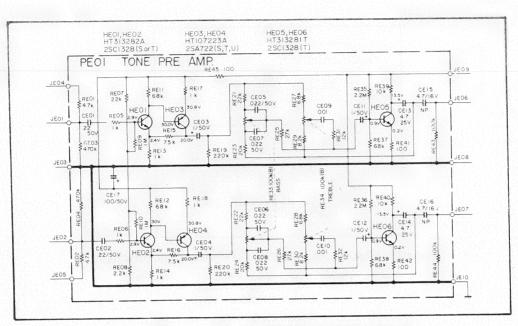


Figure 14. Tone Amplifier (PE01) Schematic Diagram

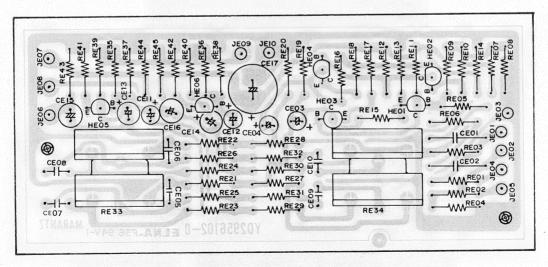


Figure 15. Tone Amplifier (PE01) Component Locations

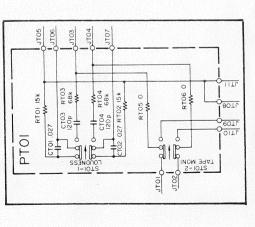


Figure 18. Loudness and Monitor Assembly (PT01) Schematic Diagram

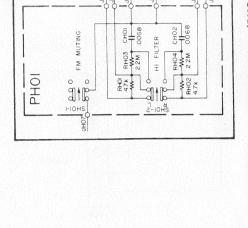


Figure 16. Muting Hi Filter Assembly (PH01) Schematic Diagram

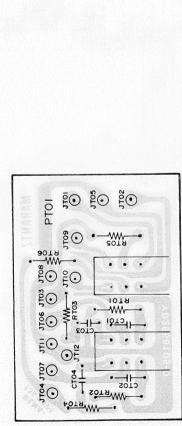


Figure 19. Loudness and Monitor Assembly (PT01) Component Locations

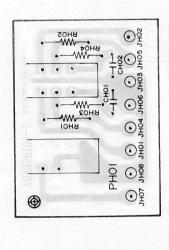


Figure 17. Muting Hi Filter Assembly(PH01 Component Locations

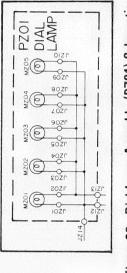


Figure 20. Dial Lamp Assembly (PZ01) Schematic Diagram

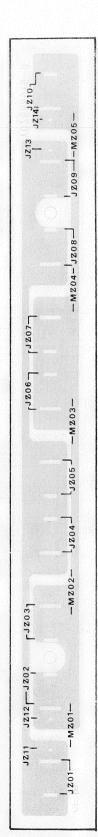


Figure 21. Dial Lamp Assembly (PZ01) Component Location

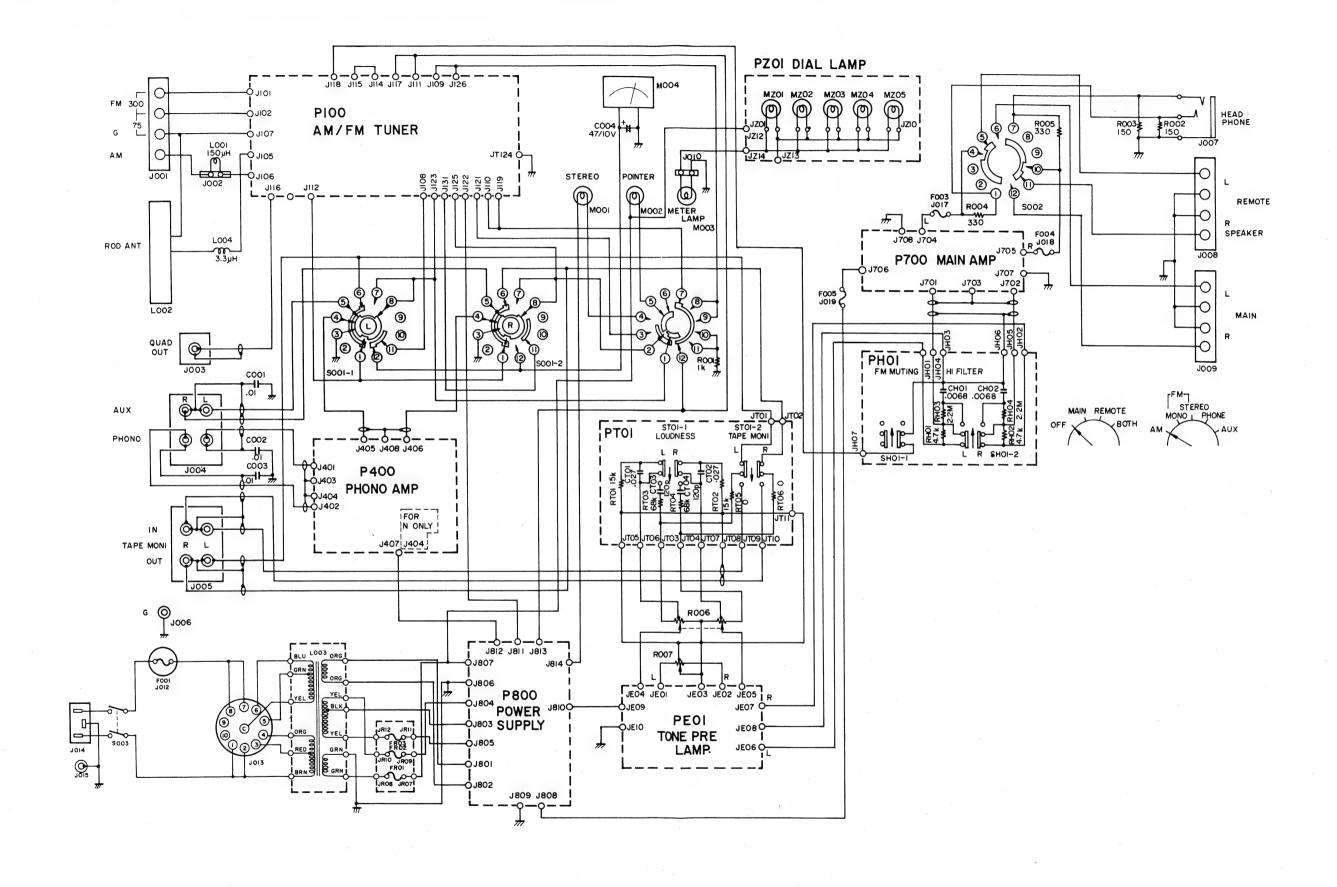


Figure 22. Wiring Diagram

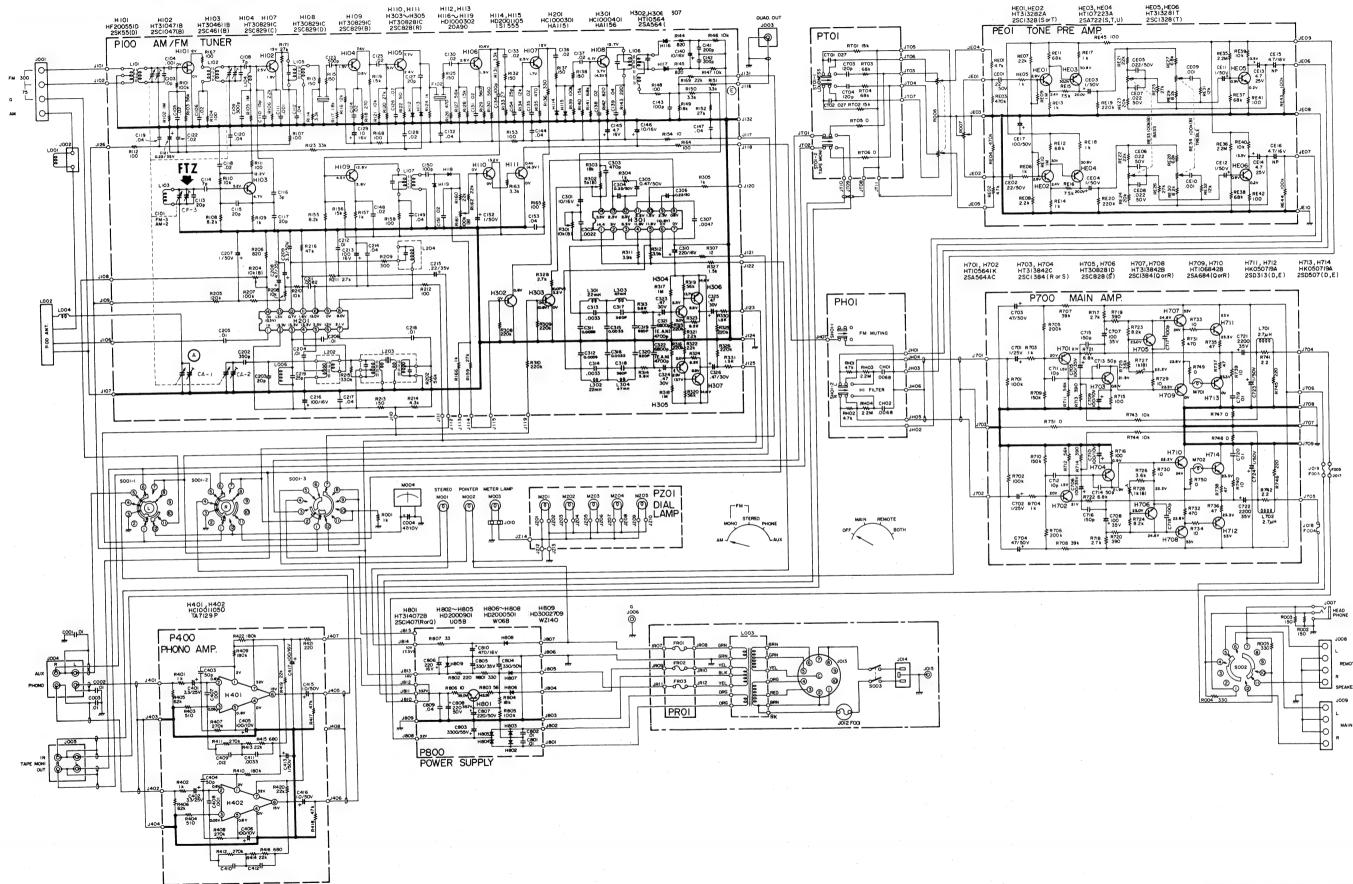


Figure 23. Schematic Diagram

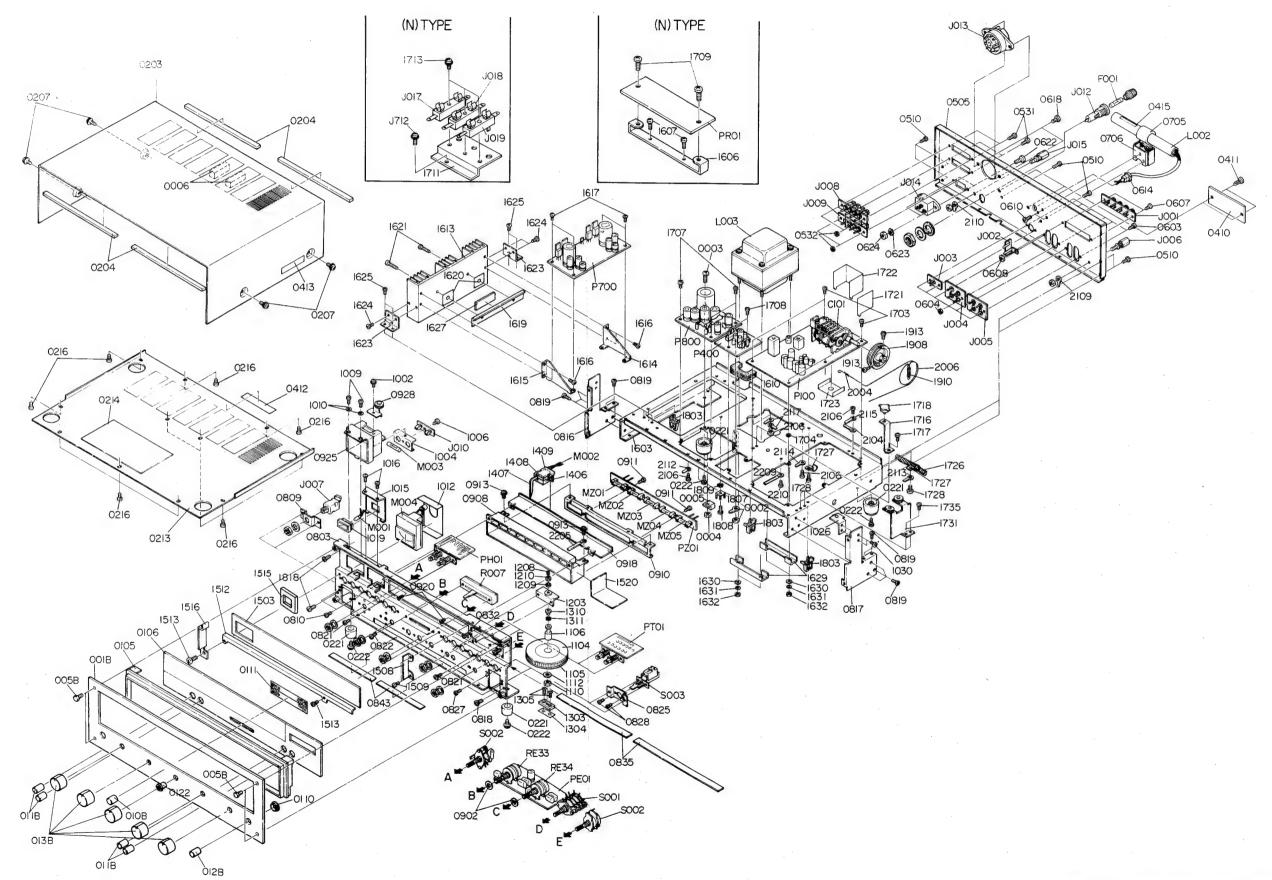


Figure 24. Exploded Mechanical Diagram

N : For Scandinavia

ESIG.	Q'TY N	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY N	PART NO.	DESCF	RIPTION
Α	1	2284063400	Front Panel Assembly (Gold)					**
001B	'1	2284063010	Escutcheon (Gold)	011B	4	2886154030	Knob	
0105	1	2853401016	Frame	0115	1	2915053010	Cover	
0106	1	2284158010	Window	012B	1	2904154040	Knob	
0110	1	2818259050		0122	1	2927055010	Collar	
	1		Bushing	013B	5	2959154010	Knob	
0111	,	2915107010	Sheet	0207	4	51480406S9	F. Washer Screw,	F4 x 6
		0004000440	E . B . I	0216	10	51100408S9	B.H.M. Screw,	B4 x 6
A1	1	2284063410	Front Panel Assembly (Black)	0221	4	2932057010	Leg	
001B	1	2284063110	Escutcheon (Black)	0222	4	51440410S9	L. Washer Screw	L4 × 10
0105	1	2853401016	Frame	0410	1	2284265010	Indicator	
0106	1	2284158010	Window					
0110	1	2818259050	Bush	0411	2	51750306B9	OS Screw	O3 x 6
0111	1	2915107010	Sheet	0412	1	2578861010	Label	
				0413	1	2932861010	Label	
В	1	2956257400	Lid Assembly, Upper	0415	1	2506265060	Indicator	
0203	1	2956257110	Lid	0433	1	2882861020	Label	
0204	1	2577118070	Spacer	0434	2	9512601020	Label	
				0506	1	2956160230	Bracket	
С	1	2956257410	Lid Assembly, Lower	0510	6	51280306U0		B3 x 6
0213	.1	2956257022	Lid	0531	4	5110030889	B.H.M. Screw	B3 x 8
0214	1	2888120010	Insulator	0532	4	53110303A9		D0 X 0
D	1	2853273400	Flywheel Assembly	0603	6	51100308\$9	B.H.M. Screw	B3 x 8
003B	2	2577063022	Escutcheon	0604	6	53110303A9		
1105	1	2577273010	Flywheel	0607	2	5110030859	B.H.M. Screw	B3 x 8
1106	1	2853112010	Shaft	0608	1	53110303E9	Hexagon Nut	
1110	1	53110603E9	Hexagon Nut	0610	3	51100306S9	B.H.M. Screw	B3 x 6
1112	1	54020601E0	Flat Washer, P	0614	1	1455259030	Bush	22 / 0
	1			0618	2	51100308\$9	B.H.M. Screw	B3 x 8
E	1	2915103040	Pointer Assembly	0621	1	54050400R0		20 7 0
1406	1	2915103013	Pointer	0622	2	51100308S9	B.H.M. Screw	B3 x 8
1407	1	2818103022	Pointer	0623	2	54050300R0	T.L. Washer OR	DJ X O
1408	1	2915103020	Pointer	0023	-	3-030300n0	I.L. Washer UM	
1409	1	2915267030	Heatsink	0624	2	E3110202E0	Hayagan N	
M002	1	1N10080300	Lamp	0705	1	53110303E9	Hexagon Nut	
	1				1 '	2819271130	Holder	
F	1	2819159410	Drum Assembly	0706	1 1	2578160520	Bracket	
1908	l i	2819159012	Drum	0707	1	2578160050	Bracket	
1910	l i	71101569M0	Spring	0708	1	2578160060	Bracker	
1913	1	51064019A9	Set Screw	0709	2	5502030410	S.H. Rivet	
.5.5	1	3.00.013/13	55. 66.61	0711	2	51280312U0		B3 × 10
G	1	1202006400	Hook Assembly	0716	2	-51280312U0		B3 x 12
2004	1	1202006400	Hook Assembly Hook	0803	1	2915160500	Bracket	
2004	1	72080802A0	String	0804	1	2915160015	Bracket	
				0805	2	2884101020	Support	
				0806	2	2884101010		
	1			0809	1	2915160060		
	1			0810	2	51100306A9		B3 × 6
				0816	1	2818160030		20 / 0
			·	0817	l i	2818160040		
				0818	4	51100405A9		B4 × 5
	1	1		0819	10	51570306B0		P3 x 6
		1		0821	4	51100306A9		B3 x 6
				0822	2	51100306A9		
0001	1	53110303A9	Hexagon Nut	1 0022	2	51100306A9	D.H.IVI. ScreW	B3 x 6
0001	1	62030039W0	Lug	0005		2015100000	Dunatur	
0002	l i	53110303A9	Hexagon Nut	0825	1	2915160050		
0002	i	62030049W0	Lug	0827	2	51100306A9		B3 × 6
0002	1	5157031080	P. Tapped Screw, P3 x 10	0828	2	51060306A9		
0003	1	53110303A9	Hexagon Nut	0832	2	51490308A9	_	L3 × 8
0005	1	2887005110	Clamper	0834	2	2886120020		
0006	2	2963056010	Buffer	0835	2	2916120010		
				0902	2	2927055020	Collar	
005B 010B	4	52017039J0	H. Head Bolt	0908	1	2871274110		
111111	1	2850154010	Knob	0910	1	2871271010	Holder	
0.00	1			0911	2	51570306B0	P. Tapped Screw	P3 x 6
0.00			*	11 00	1 -		1. I upped ocieve	13 2 0

N : For Scandinavia

REF. ESIG.	N N	PART NO.	DESCR	IPTION	REF. DESIG.	Q'TY N	PART NO.	DESCR	RIPTION
0913	2	51480306A9	F. Washer Screw	F3 x 6	1600		E4020404.40	Elas Western D	
0918	1		Guide	r3 x b	1630	4	54020401A0	Flat Washer, P	
0920		2871051020		F0.0 0	1631	4	54040402A0	Spring Washer	
	2	51042608A0	F.H.M. Screw	F2.6 x 8	1632	4	53110403A9	Hexagon Nut	
0925	1	2854274010	Reflector		1636	2	54040302A0	Spring Washer	
0928	1	2956262500	Pulley		1703	6	51280308U0	B.H. Tapped Screw	B3 x 8
929	1	2956160010	Bracket		1704	1	59030810P0	Washer	
930	1	1370112030	Shaft		1707	3	51570306\$0	P. Tapped Screw	P3 × 6
0931	1	2577262010	Pulley		1708	2	51570306S0	P. Tapped Screw	P3 × 6
002	1	51480308A9	F. Washer Screw	F3 x 8	1709	2	51100306S9	B.H.M. Screw	B3 x 6
004	1	2854271010	Holder		1711	1	2956160100	Bracket	
006	1	51570305B0		P3 x 5	1712	1	51570306B0	P. Tapped Screw	P3 x 6
009	2	51570306B0	P. Tapped Screw	P3 x 6	1713	3	51062606B0	P.H.M. Screw	P2.6 x 6
010	2	54050300R0	T.L. Washer OR		1716	1	2927160050	Bracket	
012	1	2886107010	Sheet		1717	1	51570306B0	P. Tapped Screw	P3 x 6
015	1	2915160040	Bracket		1718	1	2908259010	Bush	
016	2	51570306B0	P. Tapped Screw	P3 x 6	1721	1	2821109010	Shield	
019	1	2912259010	Bushing		1722	1	3896109030	Shield	
026	1	2956262520	Pulley		1723	1	2850109020	Shield	
027	1	2956160090	Bracket		1726	i	2881109060	Shield	
028	1	2577262010	Pulley		1727	2	2956005020	Clamper	
029	1	1370112030	Shaft		1728	2	51570306B0	P. Tapped Screw	P3 × 6
030	2	51100305A9	B.H.M. Screw	B3 x 5	1731	1	2956262510	Pulley	
203	1	2853106500	Sustainer		1732	1	2956160060	Bracket	
204	1	2818106012	Sustainer		1732	2	1370112030	Shaft	
205	1	2853106010	Sustainer		1733	2	2577262010	Pulley	
208	1	51640410D9			1735	2	1		P3 x 6
209	i	54040402N0	Spring Washer		()	1	51570306B0	P. Tapped Screw	PSXO
210	1	53110403E9	Hexagon Nut		1803	4	2886005060	Clamper	
303	1	2577106020	Sustainer		1804	3	2886005050	Clamper	
304	1	1415118010	Spacer		1807 1808	1	2910123010 51570306B0	Contactor P. Tapped Screw	P3 x 6
205	1	E104020640	F.H.M. Screw	F3 x 6	1000		F40F0200D0	T. W. L. OD	
1305	2	51040306A9		rsxo	1809	1	54050300R0	T.L. Washer OR	
1310	1	2850112020	Shaft		2008	1	56332040G0		
311	1	54040402N0	Spring Washer		2104	1	62030049W0		
503	1	2284302010	Dial		2106	6	51570306B0	P. Tapped Screw	P3 x 6
508	1	2284269020	Protector		2109	1	62040029W0	_	
509	2	51570305B0	P. Tapped Screw	P3 x 5	2110	1	62040029W0	-	
512	1	2284269010	Protector		2112	1	62030039W0	1 -	
1513	2	51570305B0	P. Tapped Screw	P3 x 5	2113	1	62030049W0	Lug	
515 516	1	2284053010 2284269030	Cover Protector		2114	1	62030049W0 62030049W0	Lug Lug	
	'				1 2113	'			
1520 1603	1	2819120050 2956105500	Insulator Chassis		2117	2	62030049W0		
604	1	2956105000	Chassis		2205	1	1382005030	Clamper	D2 C
605	1	2956105010	1		2206	2	51570306B0	P. Tapped Screw	P3 × 6
			Support		2209	1	2871005010	Clamper	DO 0
606	1	2854160030	Bracket	D2 v 6	2210	1	51570306B0	P. Tapped Screw	P3 x 6
607	2	51570306B0	P. Tapped Screw	P3 x 6	2303	1	2284851310	Instructions	
610	!	2889259010	Bushing		2327	1	2818813010	Envelope	
613	1	3899267010	Heatsink		2404	2	2221803010	Partitioner	
614 615	1	2956160020 2956160030	Bracket Bracket		2406 2411	1	2284801010 2918107150	Packing Case Sheet	
					2411	,	2910107130	Sileet	
616	4	51380306P0	P.H. Tapped Screw	P3 × 6	2412	1	9014538350	Polyethylene Bag	
1617	4	5110031289	B.H.M. Screw	B3 x 12	2414	1	9013025010	Polyethylene Bag	
1619	1	2956005010	Clamper		2418	1	9560000043	Hang Tag	
1620	2	2874118010	Spacer		2419	1	2731821010	Silicagel	
1621	2	51100312A9	B.H.M. Screw	B3 x 12	2420	1	2819056010	Buffer	
1623	2	2956160040	Bracket		2421	1	2956807010	Reinforcing	
1624	4	51380306P0	P.H. Tapped Screw	P3 x 6	2425	4	9526019030	Serial No Card	
1625	4	51570306B0	P. Tapped Screw	P3 × 6	2430	1	2882861010	Label	
1627	1	3917118010	Spacer		2432	l i	ZA02000070		
	2	2956160050	Bracket		7236	2	1382005030	Clamper	
1629	1				11	1 -			

N : For Scandinavia

REF. DESIG.	Q'TY N	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY N	PART NO.		DESCRIPT	TION
7026	1	2956160080	Bracket	C148	1	DK18203020	Ceramic Cap.	0.025	± 100 %
7936 7937	2	51570306B0	P. Tapped Screw P3 x 6	C148	1	DK18403020	Ceramic Cap.		± 100 %
	1	9512601040	Label	C150	;	DD16101010	Ceramic Cap.		± 10%
7938	1			C150	1	DK18203020	Ceramic Cap.,		± 10%
8136	1	2886005020	Clamper		1				
8536	1	9510911070	Label	C152	1	EA10505090	Electrolytic C		50V
8637	1	2818851140	Instructions	C153	1	DK18403020	Ceramic Cap.		± 10%%
8639	1	2818851120	Instructions	C154	1	DD15250020	Ceramic Cap.		± 5%
8640	1	9630000180	Guarantee Card	F101	1	FF11070050	Ceramic Filte		
				F102	1	FF11070050	Ceramic Filte		
			P100 TUNER BOARD	H101	1	HF200551D0	F.E.T.	2SK55	(D)
P100	1	YD28860190	P.W. Board				*		
	1	ZZ29568190	P.W. Board Assembly	H102	1	HT31047180		2SC1047	(B)
				H103	1	HT304611B0	Transistor	2SC461	(B)
P107	1	3444118050	Spacer	H104	1	HT308291C0	Transistor	2SC829	(C)
P108	8	2933118020	Spacer	H105	1	HT310472B0	Transistor	2SC1047	(B)
C101	1	CA32500020	Variable Cap.,	H106	1	HT308291C0	Transistor	2SC829	(C)
C103	1	DD12100010	Ceramic Cap., 10pF ±1pF	H107	1	HT308291C0		2SC829	(C)
C104	1	DK17102010	Ceramic Cap., 1000pF ± 20%	H108	1	HT308291D0		2SC829	(D)
C105	1	DK18203020	Ceramic Cap., 0.02µF ± 100 %	H109	1	HT308291B0		2SC829	(B)
C106	1	DK18203020	Ceramic Cap., 0.02µF ± 100 %	H110	1	HT308281C0		2SC828	(C)
C107	1	DD12100010	Ceramic Cap., 10pF ±1pF	H111	1	HT308281C0	Transistor	2SC828	(C)
C108	1	DD12070030	Ceramic Cap., 7pF ±1pF						, 3,
C109	i	DD15301020	Ceramic Cap., 300pF ± 5%	H112	1	HD10003020	Diode	20A90	
2.00	'			H113	1 1	HD10003020	Diode	20A90 20A90	
C110	1	DD16150030	Ceramic Cap., 15pF ±10pF	H114	1	HD20011050			
C111	1	DK17102010			1			181555	
C112	1	DK18403020		H115	1	HD20011050		1S1555	
	1			H116	1	HD10003020		20A90	
C113		DD15200020		H117	1	HD10003020		20A90	
C114	1	DD12070030		H118	1	HD10003020		20A90	
C115	1	DD15200010		H119	1	HD10003020		20A90	
C116	1	DD11030010	Ceramic Cap., 3pF ±0.5pF	J101	1	YP10001140	Plug		
C117	1	DD15200010		J102	1	YP10001140	Plug		
C118	1	DK18203020	Ceramic Cap., 0.02μF ± 100 %						
C119	1	DK18403020	Ceramic Cap., 0.04μF ± 10%%	J105	1	YP10001140	Plug		
				J106	1	YP10001140	Plug		
C120	1	DK18403020	Ceramic Cap., 0.04µF ± 10%%	J107	1	YP10001140	Plug		
C121	1	EV22403560	Electrolytic Cap., 0.22µF 35V	J108	1	YP10001140	Plug		
C122	1	DK18203020	Ceramic Cap., 0.02µF ± 100%	J109	1	YP10001140	Plug		
C123	1	DD16501010		J110	1	YP10001140	Plug		
C124	1	DK18203020	Ceramic Cap., 0.02µF ± 100%	J111	1	YP10001140	Plug		
C125	1	DK18203020		J112	1	YP10001140	Plug		
C126	1	DK18203020		J113	1	YP10001140	Plug		
C127	1	DD16200010		J114	1	YP10001140	Plug		
C128	i	DK18203020			`		.=3		
C129	i	EA10601690		J115	1	YP10001140	Plug		
	1			J116	l i	YP10001140	Plug		
C130	1	DK18203020	Ceramic Cap., $0.02\mu F \pm \frac{100}{9}\%$	J117	1	YP10001140	Plug		
C131	1	DK18203020	1 100	J118	1	YP10001140	Plug		
C132	1	DK18403020	Ceramic Cap., 0.02μ = 0.02 Ceramic Cap., 0.04μ F $\pm \frac{100}{9}$ %	J119	1	YP10001140	Plug		
C132	1	DK18203020		11	i		-		
				J120	1	YP10001140	_		
C134	1	DD16101010		J121	1	YP10001140	Plug	-	
C135	1	DK18203020		J122	1	YP10001140	_		
C136	1	DK18203020		J123	1	YP10001140	Plug		
C137	1	DK18203020		J124	1	YP10001140	Plug		
C138	1	DK18203020							
C139	1	DK18403020	Ceramic Cap., 0.04μ F $\pm {}^{10}\%$ %	J125	1	YP10001140	_		
				J126	1	YP10001140			
C140	1	EA10601690		J131	1	YP10001140	Plug		
C141	1	DD16201010		J132	1	YP10001140	Plug		
C142	1	DD16201010		L101	1	LA12026120	Ant Coil		
C143	1	DD16101010		L102	1	LA12026100			
C144	1	DK18403020	Ceramic Cap., 0.04µF ± 100%	L103	1	LO12036010			
C145	1	EA47601690		L104	1	LC17510010			
C146	1	EA10601690		L105	1	LI10016010	I.F.T.		
C147	1	DK18403020		L106	1	L114016230	I.F.T.		
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REF. DESIG.	Q'TY N	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY N	PART NO.	DESCRIP	PTION
7000		00=0400000		04.40		D1440000000	0- : 0 - 000 5	± 100 o/
7936	1	2956160080	P. Tapped Screw P3 x 6	C148	1	DK18203020	Ceramic Cap., 0.02µF	± 100 %
7937	2	51570306B0		C149	1	DK18403020	Ceramic Cap., 0.04µF	± 100 %
7938	1	9512601040	Label	C150	1	DD16101010	Ceramic Cap., 100pF	± 10%
8136	1	2886005020	Clamper	C151	1	DK18203020	Ceramic Cap., 0.02μF	± 100 %
8536	1	9510911070	Label	C152	1	EA10505090	Electrolytic Cap., 1μF	50V
8637	1	2818851140	Instructions	C153	1	DK18403020	Ceramic Cap., 0.04µF	± 100 %
8639	1	2818851120	Instructions	C154	1	DD15250020	Ceramic Cap., 25pF	± 5%
8640	1	9630000180	Guarantee Card	F101	1	FF11070050	Ceramic Filter	
				F102	1	FF11070050	Ceramic Filter	
			P100 TUNER BOARD	H101	1	HF200551D0	F.E.T. 2SK55	(D)
P100	1	YD28860190	P.W. Board	11			0	
	1	ZZ29568190	P.W. Board Assembly	H102	1	HT31047180	Transistor 2SC1047	
				H103	1	HT304611B0	Transistor 2SC461	(B)
P107	1	3444118050	Spacer	H104	1	HT308291C0	Transistor 2SC829	(C)
P108	8	2933118020	Spacer	H105	1	HT310472B0	Transistor 2SC1047	(B)
C101	1	CA32500020	Variable Cap.,	H106	1	HT308291C0		(C)
C103	1 1	DD12100010		H107	1	HT308291C0		(C)
C104	i	DK17102010		H108	1	HT308291D0		(D)
C105	1	DK17102010		11	1			
C106	1	DK18203020		H109		HT308291B0		(B)
	1			H110	1	HT308281C0		(C)
C107	1	DD12100010		H111	1	HT308281C0	Transistor 2SC828	(C)
C108	1	DD12070030						
C109	1	DD15301020	Ceramic Cap., 300pF ± 5%	H112	1	HD10003020		
	.			H113	1	HD10003020	Diode 20A90	
C110	1	DD16150030		H114	1	HD20011050	Diode 1S1555	
C111	1	DK17102010	Ceramic Cap., 1000pF ± 20%	H115	1	HD20011050		
C112	1	DK18403020	Ceramic Cap., 0.04µF	H116	1	HD10003020		
C113	1	DD15200020		H117	1	HD10003020		
C114	1	DD12070030		H118	li	HD10003020		
C115	1 1	DD15200010		H119	1	1		
C116	1	DD15200010			1	HD10003020		
	1 '			J101	1	YP10001140	Plug	
C117	1	DD15200010		J102	1	YP10001140	Plug	
C118	1	DK18203020						
C119	1	DK18403020	Ceramic Cap., 0.04μ F $\pm {}^{100}\%$	J105	1	YP10001140	Plug	
				J106	1	YP10001140	Plug	
C120	1	DK18403020		J107	1	YP10001140	Plug	
C121	1	EV22403560	Electrolytic Cap., 0.22µF 35V	J108	1	YP10001140	Plug	
C122	1	DK18203020	Ceramic Cap., 0.02µF ± 100%	J109	1	YP10001140	Plug	
C123	1	DD16501010		J110	1	YP10001140	Plug	
C124	1	DK18203020		J111	1	YP10001140		
C125	1	DK18203020		J112	l i	YP10001140	Plug	
C126	1	DK18203020		J113	l i	YP10001140	Plug	
C127	1	DD16200010		J114	1.	YP10001140	Plug	
		1		3114		1710001140	, 109	
C128	1	DK18203020		1445		V040004440	DI.	
C129	1	EA10601690	Electrolytic Cap., 10μF 16V	J115	1	YP10001140	_	
0.00	1 .	- MARGE	0 10 000 = 100 =	J116	1	YP10001140	1 -	
C130	1	DK18203020	Ceramic Cap., 0.02μ F $\pm \frac{100}{0.00}\%$	J117	1	YP10001140	_	
C131	1	DK18203020	Ceramic Cap., $0.02\mu F \pm \frac{100}{0}\%$	J118	1	YP10001140		
C132	1	DK18403020	Ceramic Cap., $0.04\mu F \pm \frac{100}{0.08}\%$	J119	1	YP10001140	Plug	
C133	1	DK18203020		J120	1	YP10001140	Plug	
C134	1	DD16101010		J121	1	YP10001140	Plug	
C135	1	DK18203020		J122	1	YP10001140		
C136	1	DK18203020	1	J123	1	YP10001140		
C137	1	DK18203020		J124	i	YP10001140		
C138	i	DK18203020		1				
C139	i	DK18403020		J125	1	YP10001140	Plug	
5.00	'	510,10403020	- 0 /0					
C140	1	EA10601690	Electrolytic Cap., 10µF 16V	J126	1 1	YP10001140		
	1			J131	1	YP10001140		
C141	1	DD16201010		J132	1	YP10001140		
C142	1	DD16201010		L101	1	LA12026120		
C143	1	DD16101010		L102	1	LA12026100		
C144	1	DK18403020		L103	1	LO12036010	Osc Coil	
C145	1	EA47601690		L104	1	LC17510010		
C146	1	EA10601690		L105	1	L110016010	I.F.T.	
C147	1	DK18403020		L106	l i	LI14016230	I.F.T.	
						2,1.310200		

N : For Scandinavia

REF. DESIG.	Q'TY N	PART NO.		DESCRIPTION		REF. DESIG.	Q'TY N	PART NO.	DESCRIPTION	N .
L107	1	L110156020	I.F.T.			R160	1	RT05223140	Resistor 22KΩ ±5%	1/4W
R101	1	RT05104140	Resistor	100KΩ ±5%	1/4W	R161	1	RA01040180	Trimming Resistor 100KΩ	(B)
R102	1	RT05105140	Resistor	1MΩ ±5%	1/4W	R162	1	RT05223140	Resistor 22KΩ ±5%	1/4W
R103	1	RT05563140		56KΩ ±5%	1/4W	R163	1	RT05332140	Resistor 3.3KΩ ±5%	1/4W
R104	1	RT05101140	Resistor	100Ω ±5%	1/4W	R164	1	RT05101140	Resistor 100Ω ±5%	1/4W
R105	1	RT05105140	Resistor	1MΩ ±5%	1/4W	R165	1	RT05101140	Resistor $100\Omega \pm 5\%$	1/4W
R106	1	RT05222140	Resistor	2.2KΩ ±5%	1/4W	R166	1	RT05102140	Resistor 1KΩ ±5%	
R107	1	RT05101140	Resistor	100Ω ±5%	1/4W	R167	i	RT05101140	Resistor 100Ω ±5%	
R108	li	RT05822140	Resistor	8.2KΩ ±5%	1/4W	R168	l i	RT05101140	Resistor 100Ω ±5%	
R109	1	RT05102140	Resistor	1KΩ ±5%	1/4W	R169	i	RT05223140	Resistor 22KΩ ±5%	
	'			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
R110	1	RT05103140	Resistor	10KΩ ±5%	1/4W	R170	1	RC00000120	Resistor 0Ω	
R111	1	RT05101140	Resistor	100Ω ±5%	1/4W	R171	1	RT05273140	Resistor 27KΩ ±5%	1/4W
R112	1	RT05101140	Resistor	100Ω ±5%	1/4W	R172	1	GD05103140	Resistor 10KΩ ±5%	1/4W
R113	1	RT05151140		150Ω ±5%	1/4W	C202	1	DF65351010	Film Cap., 350pF ±5%	•
R114	1	RT05332140		3.3KΩ ±5%	1/4W	C203	1	DD15200010		
R115	1 1	RT05151140	1	150Ω ±5%	1/4W	C204	1	DF17103010	Film Cap., 0.01µF ±20	
R116	1	RT05123140		12KΩ ±5%	1/4W	C205	1 1	DF17103010		
R116		RT05123140		1.8KΩ ±5%	1/4W	C205	1	DF17103010	Film Cap., 0.01µF ±20	
1	1					11		1		
R118	1	RT05271140	Resistor	270Ω ±5%	1/4W	C207	1	EA10505090		
R119	1	RT05152140	Resistor	1.5KΩ ±5%	¼W	C208	1	EA47503590	Elect Cap., 4.7μF 35\	
R120	1	RT05273140	Resistor	27KΩ ±5%	1/4W	C209	1	EA33505090	Elect Cap., 3.3µF 50\	,
1	1	RT05103140	1	10KΩ ±5%		C210	i	DK17102010		
R121	1 .			510Ω ±5%		C210	1	DF16822010		
R122	1	RT05511140				11	1			
R123	1	RT05333140	1	33KΩ ±5%		C212	1	DF17103010		
R124	1	RT05102140		1KΩ ±5%		C213	1	EA10701690		0
R125	1	RT05151140		150Ω ±5%		C214	1	DK18403020		,
R126	1	RT05471140	Resistor	470Ω ±5%		C215	1	EV22403560		
R127	1	RT05562140	Resistor	5.6KΩ ±5%	1/4W	C216	1	EA10701690		/
R128	1	RT05152140	Resistor	1.5KΩ ±5%	1/4W	C217	1	DK18403020		
R129	1	RT05561140	Resistor	560Ω ±5%	%W	C218	1	DK17103010	Ceramic Cap., 0.01µF ±20	1%
D400		DT05504440		F000 +F0/	1/14/	0210	1	DD15350030	Ceramic Cap., 25pF ±59	,
R130	1 1	RT05561140		560Ω ±5%		C219	'1	DD15250020		0
R131	1	RT05152140	1	1.5KΩ ±5%		H201		HC10003010		
R132	1	RT05151140		150Ω ±5%		L202	1	LO10010490		
R133	1	RT05272140		2.7KΩ ±5%		L203	1	L110280030	I.F.T.	
R134	1	RT05123140		12KΩ ±5%		L204	1	L110010640	I.F.T.	
R135	1	RT05471140	Resistor	470Ω ±5%		L206	1	LC21050010	1	/ 1/144
R136	1	RT05331140	Resistor	330Ω ±5%		R202	1	RT05562140		
R137	1	RT05151140	Resistor	150Ω ±5%	1/4W	R204	1	RA01030250	1	(B)
R138	1	RT05151140	Resistor	150Ω ±5%	1/4W	R205	1	RT05124140		
R139	1	RT05104140	Resstor	100KΩ ±5%	1/4W	R206	1	RT05821140	Resistor 820Ω ±59	6 14W
				4=	4444				- 100K5 45K	. 1/141
R140		RT05153140		15KΩ ±5%		R207	1	RT05104140		6 1/4W
R141	1	RT05682140		6.8KΩ ±5%		R208	1	RT05103140		
R142		RT05821140		820Ω ±5%		R209	1	RT05301140		
R143	1	RT05221140	Resistor	220Ω ±5%		R210	1	RT05103140		
R144	1	RT05821140	Resistor	820Ω ±5%	1/4W	R211	1	RT05272140		6 1/4W
R145	}	RT05821140	Resistor	820Ω ±5%	1/4W	R212	1	RT05101140	Resistor $100\Omega \pm 5^{\circ}$	6 1/4W
R146		RT05103140		10KΩ ±5%	1/4W	R213	1	RT05151140	Resistor 150 Ω ±5°	% 1/4W
R147	1	RT05103140		10KΩ ±5%		R214	1	RT05432140		% 1/4W
R148		RT05101140		100Ω ±5%		R215	1	RT05334140		
R149	1	RT05183140		18KΩ ±5%		R216	1	RT05473140		
R150		RT05332140		3.3KΩ ±59		C301	1	EA10601690		
R151		RT05332140		3.3KΩ ±5%		C302	1	DF16222010		
R152	1	RT05273140	Resistor	27KΩ ±5%	6 1/4W	C303	1	DF55471010		
R153	1	RT05101140	Resistor	100Ω ±5%	6 1/4W	C304	1	EQ22405010	Electrolytic Cap., 0.22μF	50V
R154		RT05100140	Resistor	10Ω ±59	6 1/4W	C305	1	EQ47405010	Electrolytic Cap., 0.47μF	50V
R155	1	RT05822140		8.2KΩ ±59	6 1/4W	C306	1	EQ22405010	Electrolytic Cap., 0.22μF	
R156		RT05153140		15KΩ ±59		C307	1	DF17473010		
R157		RT05102140		1KΩ ±59		C310	1	EA22701690		
R158		RT05101140		100Ω ±5%		C311	li	DF16392010		0%
		RT05273140		27KΩ ±5%	_	C312	1	DF16392010		
R159	1	n 1092/3140	Hesistor	2/12/2 -57	U /4 T V	0312	'	D. 10392010	, σαρ., σ.σσσσμι ±1	- /0
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N : For Scandinavia

REF. DESIG.	Q'TY N	PART NO.	DESCRI	PTION		REF. DESIG.	Q'TY N	PART NO.	DESCRIPTION	
				 04					DAGO FOL AMO DOADO	
C313	1 1	DF15332010	Film Cap., 0.0033µF	±5%		D400		VD00EC1040	P400 EQL. AMP BOARD	
C314	1	DF15332010	Film Cap., 0.0033µF	±5%		P400	1	YD29561040	P.W. Board	
C315	1	DF16332010	Film Cap., 0.0033µF	±10%			1	ZZ29561040	P.W. Board Assembly	
C316	1	DF16332010	Film Cap., 0.0033μF	±10%						
C317	1	DD15361010	Ceramic Cap., 360pF	±5%		P408	1	2933118020	Spacer	
C318	1	DD15361010		±5%		R401	1	RT05102140	Resistor $1K\Omega \pm 5\%$	1/4W
C319	1	DF55821010	Film Cap., 820pF	±5%		R402	1	RT05102140	Resistor $1K\Omega \pm 5\%$	1/4W
C320	1	DF55821010	Film Cap., 820pF	±5%		R403	1	RT05511140	Resistor $510\Omega \pm 5\%$	1/4W
C321	1	DF15472010	Film Cap., 4700pF	±5%		R404	1	RT05511140	Resistor $510\Omega \pm 5\%$	1/4W
C322	1	DF15472010	Film Cap., 4700pF	±5%		R405	1	RT05623140	Resistor 62K Ω ±5%	1/4W
						R406	1	RT05623140	Resistor $62K\Omega \pm 5\%$	1/4W
C323	1	EV47403560	Electrolytic Cap., 0.	047µF	35V	R407	1	RN05274140		1/4W
C324	1	EV47403560	Electrolytic Cap., 0.	047µF	35V	R408	1	RN05274140	Resistor 270K Ω ±5%	1/4W
C325	1	EV47403560	Electrolytic Cap., 0.	047µF	35V	R409	1	RN05184140	Resistor 180K Ω ±5%	1/4W
C326	1	EV47403560		0.47µF	35V					
H301	i	HC10009060		•		R410	1	RN05184140	Resistor 180KΩ ±5%	1/4W
H302	li	HT105641B0		(B)		R411	1	RN05274140	Resistor 270KΩ ±5%	1/4W
H303	1	HT308281C0				R412	1	RN05274140		1/4W
						R413	1	RT05223140	Resistor 22KΩ ±5%	1/4W
H304	1	HT308281C0				R414	1	RT05223140	Resistor 22KΩ ±5%	1/4W
H305	1 1	HT308281C0				R415	1	RT05681140	Resistor $680\Omega \pm 5\%$	1/4W
H306	1	HT105641B0	Transistor 2SA564	(D)		R416	1	RT05681140	Resistor $680\Omega \pm 5\%$	1/4W
			- : 004504	(0)						14W
H307	1 1	HT105641B0		(B)		R417	1	RT05473140		1/4W
L301	1	LC22260040				R418	1	RT05473140		
L302	1	LC22260040	1			R419	1	RT05223140	Resistor 22K Ω ±5%	1/4W
L303	1	LC24760010				11			2016	1/101
L304	1	LC24760010		4=1		R420	1	RT05223140	Resistor 22KΩ ±5%	1/4W
R301	1	RA01030250	_	(B)		R421	1	RT05221140	Resistor 220Ω ±5%	1/4W
R302	1	RA04720050	Trimming Resistor			R422	1	RT05184140		1/4W
R303	1	RT05163140	Resistor 16KΩ	±5%	1/4W	C401	1	EV33502560		25V
R304	1	RT05102140	Resistor 1KΩ	±5%	1/4W	C402	1	EV33502560		25V
R305	1	RT05102140	Resistor 1KΩ	±5%	1/4W	C403	1	DD16101010		
						C404	1	DD16101010	Ceramic Cap., 100pF ±10%	
R307	1	RT05120140	Resistor 12KΩ	±5%	1/4W	C405	1	EA10701090	Electrolytic Cap., 100μF	10V
R308	1	RT05224140		±5%	1/4W	C406	1	EA10701090	Electrolytic Cap., 100µF	10V
R309	1	RT05224140		±5%	1/4W	C407	1	DK17102010	Ceramic Cap., 0.001 µF ±209	ó
R310	1	RT05224140	2201100	±5%	1/4W					
R311	i	RT05392140	220.111	±5%	1/4W	C408	1	DK17102010	Ceramic Cap., 0.001 µF ±20%	6
R312	1	RT05392140	1	±5%	1/4W	C409	1	DF15123010	Film Cap., 0.012µF ±5%	
R313	1	RT05562140	0.0	±5%	1/4W	C410	1	DF15123010	Film Cap., 0.012µF ±5%	
R314	1 1	RT05562140	0.0	±5%	1/4W	C411	1	DF15332010		
R315		RT05224140		±5%	1/4W	C412	1	DF15332010		
R316		RT05224140		±5%	1/4W	C413	i	EE10505040		50V ·
n310		N 103224140	Resistor 220KΩ	-270	/411	C415	1	EE10505040		50V
D217	1	DT05105140	Posistor 1MO	±5%	1/4W	11	1	EE10505040		50V
R317	1	RT05105140			1/4W	C416	1	EA10703590		35V
R318		RT05105140			1/4W	C417	1	HC10011050		55 V
R319		RT05563140	*			H401	'	HC10011050	10 14/1295	
R320		RT05563140				11	1 -	11010011050	16 TA74000	
R321		RT05222140	1		1/4W	H402	1	HC10011050		
R322		RT05222140				J401	1	YP10001130		
R323	1	RT05622140	1			J402	1	YP10001130	Plug	
R324	1	RT05622140				J404				
R325	1	RT05224140			1/4W		5	YP10001130	Plug	
R326	1	RT05224140	Resistor 220KΩ	±5%	1/4W	J408				
R327	1	RT05152140	Resistor 1.5KΩ	±5%	1/4W				P700 MAIN AMP. BOARD	
	1	RT05152140				P700	1	YD29561010		
R328						1,700	1	ZZ29561010		
R329		RC00000120					'	222301010	1.44. Board Assembly	
R330	- 1	RT05152140				0700	100	2022110000	Conner	
R331	1	RT05152140	D Resistor 1.5KΩ	±5%	1/4W	P708	16			251
		ļ				C701	1	EV10502560		25V
	İ					C702	1	EV10502560		25V
						C703	1	EA47605090		50V
						C704	1	EA47605090	, , , , , , , , , , , , , , , , , , , ,	50V
						C705	1	EE10703550	Electrolytic Cap., 100μF	35V
			•							
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REF. DESIG.	Q'TY N	PART NO.	DESCRIPTION		REF. DESIG.	Q'TY N	PART NO.	DESCRIPTION	
C706	1	EE10703550	Electrolytic Cap., 100µF	35V	R725	1	RT05362140	Resistor 3.6KΩ ±5%	1/4W
C707	1	EA10703590	Electrolytic Cap., 100µF	35V	R726	1	RT05362140	Resistor 3.6K Ω ±5%	1/4W
C708	1	EA10703590	Electrolytic Cap., 100µF	35V	R727	1 1	RA01020210	Trimming Resistor, $1K\Omega$	(B)
C709	1	EA10701090	Electrolytic Cap., 100µF	10V	R728	1	RA01020210	Trimming Resistor, 1KΩ	(B)
C710	1	EA10701090		10V	R729	1	RT05100140	Resistor $10\Omega \pm 5\%$	1/4W
	1	DD16100010	1 1 1 1			1			
C711	1 1				R730	1 1	RT05100140	Resistor 10Ω ±5%	1/4W
C712	1	DD16100010			R731	1	GF05471140	Resistor 470Ω ±5%	1/4W
C713	1	DD16500010	Ceramic Cap., 50pF ±109		R732	1	GF05471140	Resistor 470Ω ±5%	%W
C714	1	DD16500010	Ceramic Cap., 50pF ±109		R733	1	GF05100140	Resistor $10\Omega \pm 5\%$	1/4W
C715	1	DD16151010	Ceramic Cap., 150pF ±109	%	R734	1	GF05100140	Resistor $10\Omega \pm 5\%$	1/4W
C716	1	DD16151010			R735	1	GK05472020	Resistor 0.47Ω ±5%	2W
C717	1	DD16101010			R736	1	GK05472020	Resistor 0.47Ω ±5%	2W
C718	1	DD16101010	Ceramic Cap., 100pF ±109		R737	1	GK05472020	Resistor 0.47Ω ±5%	2W
C719	1	DF16104050	Film Cap., $0.1\mu\text{F} \pm 10^{\circ}$		R738	1	GK05472020	Resistor 0.47Ω ±5%	2W
C720	1	DF16104050	Film Cap., $0.1\mu\text{F} \pm 10^{\circ}$		R739	1	RC10100120	Resistor $10\Omega \pm 10\%$	
C721	1	EB22803550	Electrolytic Cap., 2200µF	35V	R740	1	RC10100120	Resistor $10\Omega \pm 10\%$	
C722	1	EB22803550	Electrolytic Cap., 2200µF	35V	R741	1	RC10022120	Resistor $2.2\Omega \pm 10\%$	
C723	1	EA10510090	Electrolytic Cap., 1µF	100V	R742	1	RC10022120	Resistor 2.2Ω ±10%	
C724	1	EA10510090	Electrolytic Cap., 1µF	100V	R743	1	RT05103140	Resistor 10KΩ ±5%	1/4W
H701	1	HT105641K0	Transistor 2SA564	(K)	R744	1	RT05103140	Resistor 10KΩ ±5%	¼W
H702	1	HT105641K0	Transistor 2SA564	(K)	R745	1	GF05821120	Resistor 820Ω ±5%	1/2W
H703	1	HT313842C0	Transistor 2SC1384	(R,S)	R746	1	GF05821120	Resistor 820Ω ±5%	1/2W
H704	1 1	HT313842C0	Transistor 2SC1384	(R, S)	R747	1	RC00000120	Resistor Jamper	
H705	1	HT308281D0	Transistor 2SC828	(D)	R748	1	RC00000120	Resistor Jamper	
H706	1	HT308281D0	Transistor 2SC828	(D)	R749	1	RC00000120	Resistor Jamper	
J701	1	YP10001130	Plug		R750	1	RC00000120	Resistor Jamper	
J702	1	YP10001130	Plug		R751	1	RC00000120	Resistor Jamper	
J703	1	YP10001130	Plug		R752	1	RC00000120	Resistor Jamper	
J704	1	YP10001130	Plug						
J705	1	YP10001130	Plug					P800 POWER SUPPLY BOAT	RD
					P800	1	YD29561030	P.W. Board	
J706	1	YP10001130	Plug		11	1	ZZ29561030	P.W. Board Assembly	
J707	1	YP10001130	Plug						
L701	1	LC22720010	Choke Coil		P808	14	2933118020	Spacer, R802, R807, H806, F	1808
L702	1	LC22720010	Choke Coil		P809	10	2933118010	Spacer, R801, R802~H805	
M701	1	IN10060390	Lamp		C801	1	DK18103510	Ceramic Cap., 0.01µF	
M702	1	IN10060390	Lamp		C802	1	DK18103510	Ceramic Cap., 0.01µF	
R701	1	RT05104140	Resistor 100KΩ ±5%	1/4W	C803	1	EB33805520	Electrolytic Cap., 3300µF	55V
R702	1	RT05104140		1/4W	C804	1	EA47705090		50V
R703	1	RT05102140		1/4W	C805	1	EA33703590	Electrolytic Cap., 330µF	35V
R704	1	RT05102140			C806	1	EA22701690	Electrolytic Cap., 220µF	16V
	1 '	33.32.40	1100		C807	i	EA10705090	Electrolytic Cap., 100µF	
R705	1	RT05204140	Resistor 200KΩ ±5%	5 1/4W	C808	1	EA47705090		
R706	1	RT05204140			0000	'	LA-7703030	4/0μ	30 V
R707		RT05204140			C809	1	DK18403010	Ceramic Cap., 0.04µF	
	1	RT05393140	· ·		C810	1	EA47701690		16V
R708	1				3 1		HT314072B0		100
R709	1	RT05154140			H801	1			
R710	1	RT05154140			H802	1 1	HD20009010		
R711	1	RT05562140			H803	1	HD20009010		
R712	1	RT05562140			H804	1	HD20009010		
R713	1	RT05391140			H805	1	HD20009010		
R714	1	RT05391140	Resistor 390 Ω ±5%	6 1/4W	H806	1	HD20005010		
					H807	1	HD20005010		
R715	1	RT05101140			H808	1	HD20005010	Diode W06B	
R716	1	RT05101140							
R717	1	RT05272140		6 1/4W	H809	1	HD30027090	Zener WZ140	
R718	1	RT05272140			J801	1	YP10001130	Plug	
R719	1	RT05391140			J802	1	YP10001130	Plug	
R720	1	RT05391140			J803	1	YP10001130	Plug	
R721	1	RT05682140			J804	1	YP10001130		
R722	1	RT05682140			J805	1	YP10001130		
R723		RT05822140			J806	i	YP10001130		
R724		RT05822140			J807	1	YP10001130		
					<u> </u>				

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REF. DESIG.	Q'TY N	PART NO.	DESCRIPTION		REF. DESIG.	Q'TY N	PART NO.	DESCRIP	TION	-
									1=0/	1/11/
J808	1	YP10001130	Plug		RE09	1	RN05105140	Resistor $1M\Omega$		1/4W
J809	1	YP10001130	Plug	l l	RE10	1	RN05105140	Resistor 1MΩ		1/4W
J810	1	YP10001130	Plug		RE11	1	RT05683140	Resistor 68KΩ		1/4W
J811	1	YP10001130	Plug		RE12	1	RT05683140	Resistor $68K\Omega$		1/4W
J812	1	YP10001130	Plug		RE13	1	RT05102140	Resistor $1K\Omega$		1/4W
J813	1	YP10001130	Plug		RE14	1	RT05102140	Resistor 1KΩ		1/4W
J814	1	YP10001130	Plug		RE15	1	RT05752140	Resistor 7.5 K Ω		1/4W
J815	1	YP10001130	Plug		RE16	1	RT05752140	Resistor 7.5K Ω	±5%	1/4W
J816	1	YP10001130	Plug		RE17	1	RT05102140	Resistor 1KΩ	±5%	1/4W
R801	1	GJ05331030		3W	RE18	1	RT05102140	Resistor 1KΩ	±5%	%W
R802	1	GJ05221020		2W	RE19	1	RT05224140	Resistor 220KΩ		14W
R803	1	GF05560120		/2W	RE20	1	RT05224140	Resistor 220KΩ		1/4W
R804	1	RT05183140	Resistor 18KΩ ±5%	/4W	RE21	1	RT05223140	Resistor 22KΩ		1/4W
R805	1	RT05104140	Resistor 100KΩ ±5%	1/4W	RE22	1	RT05223140	Resistor 22KΩ		1/4W
R806	1	GF05100120	Resistor 10Ω ±5%	½W	RE23	1	RT05203140	Resistor 20KΩ		1/4W
R807	1	GF05330120	Resistor 33Ω ±5%	1/2W	RE24	1	RT05203140	Resistor 20KΩ		1/4W
					RE25	1	RT05273140	Resistor 27KΩ		1/4W
			PE01 TONE AMP. BOARD		RE26	1	RT05273140	Resistor 27KΩ	±5%	1/4W
PE01	1	YD29561020	P.W. Board		RE27	1	RT05682140	Resistor 6.8KΩ	±5%	1/4W
	1	ZZ29561020	P.W. Board Assembly		RE28	1	RT05682140	Resistor 6.8KΩ	±5%	1/4W
PE08	2	2933118020	Spacer, RE45		RE29	1	RT05822140	Resistor 8.2KΩ		1/4W
CE01	1	DF17224050	Film Cap., 0.22μF ±20%		RE30	1	RT05822140	Resistor 8.2K		1/4W
CE02	1	DF17224050	Film Cap., 0.22µF ±20%		RE31	1	RT05123140	Resistor 12Ks		1/4W
CE03	1	EE10505010	Electrolytic Cap., 1µF	50V	RE32	1	RT05123140	Resistor 12KS	±5%	1/4W
CE04	1	EE10505010		50V	RE33	1	RM01040050	Variable Resistor 1	00K	(B)
CE05	1	DF16223050	Film Cap., 0.022µF ±10%		RE34	1	RM01040050		00K	(B)
CE06	1	DF16223050	Film Cap., 0.022µF ±10%		RE35	1	RT05225140	Resistor 2.2Ms	2 ±5%	1/4W
CE07	1	DF16223050	Film Cap., 0.022µF ±10%		RE36	1	RT05225140	Resistor 2.2MS	2 ±5%	1/4W
CE08	1	DF16223050	Film Cap., 0.022µF ±10%		RE37	1	RT05683140	Resistor 68KS	±5%	1/4W
CE09	1	DF16102050	Film Cap., 1000pF ±10%		RE38	1	RT05683140	Resistor 68KS	2 ±5%	1/4W
CE10	1	DF16102050	Film Cap., 1000pF ±10%		RE39	1	RT05103140	Resistor 10Ks		1/4W
CE11	1	EE10505010	Electrolytic Cap., 1µF	50V	RE40	1	RT05103140	Resistor 10Ks	2 ±5%	1/4W
CE12	1	EE10505010	Electrolytic Cap., 1µF	50V	RE41	1	RT05101140	Resistor 1009	2 ±5%	1/4W
CE13	1	EE47502510		25V	RE42	1	RT05101140	Resistor 1009	2 ±5%	1/4W
CE14	1	EE47502510		25V	RE43	1	RT05104140	Resistor 100KS	≥ ±5%	1/4W
CE15	1	EQ47501610		16V NP	RE44	1	RT05104140	Resistor 100Ks	2 ±5%	1/4W
CE16	1	EQ47501610		16V NP	RE45	1	RT05101140	Resistor 1009	2 ±5%	1/4W
CE17	1	EA10705090		50V	li .					
HE01	1	HT313282A0	and controlly the Capity	(S, T)	\]	İ		PHO1 MUTING, HI I	ILTER	
HE02	1	HT313282A0		(S, T)	PH01	1	YD29561060	BOARD P.W. Board		
11500			7	(C T 11)	11	1		P.W. Board Assembly	,	
HE03	1	HT107223A0	1	(S, T, U)		1	ZZ29561060	vv. Dodiu Assembly		
HE04	1	HT107223A0		(S, T, U)		1	DE16693050	Film Cap., 0.0068µ	+100	
HE05		HT313281T0		(T)	CH01	1	DF16682050			
HE06	1	HT313281T0	1	(T)	CH02	1	DF16682050		-10%	,
JE01	1	YP10001130			JH01	1	YP10001130	Plug		
JE02	1	YP10001130			JH02	1	YP10001130			
JE03	1	YP10001130			JH03	1	YP10001130			
JE04	1	YP10001130	1 -		JH04	1	YP10001130	_		
JE05	1	YP10001130			JH05	1	YP10001130	_		
JE06	1	YP10001130	Plug		JH06	1	YP10001130			
1					JH07	1	YP10001130			
JE07	1	YP10001130	Plug		RH01	1	RT05472140	Resistor 4.7Ks	2 ±5%	1/4W
JE08	1	YP10001130	Plug							
JE09	1	YP10001130	Plug		RH02	1	RT05472140		2 ±5%	1/4W
JE10	1	YP10001130			RH03	1	RT05225140		Ω ±5%	1/4W
RE01	l l	RT05472140	1	1/4W	RH04	1	RT05225140	Resistor 2.2M	Ω ±5%	1/4W
RE02		RT05472140	'	1/4W	SH01	1	SP02020080	Push Switch		
RE03		RT05474140		1/4W						
RE04	1	RT05474140		1/4W	11	i				
RE05		RT05102140		1/4W						
RE06		RT05102140	1	1/4W						
RE07	1	RT05223140	Resistor 22KΩ ±5%	1/4W						
RE08		RT05222140		1/4W				1		
1	· '	11100222140			11					

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REF. DESIG.	Q'TY N	PART NO.	DESCRIPTION	REF. DESIG.	Q'TY N	PART NO.	DESCTIPTION		
			PT01 LOUDNESS, MONITOR	JR08	1	YP10001130	Plug		
			BOARD	JR09	1 1	YP10001130	Plug		
PT01	1	YD29561050		JR10	1	YP10001130	Plug		
	1	ZZ29561050		JR11	1	YP10001130	Plug		
	'	2229561050	1.44. Board Assimbly	JR12	1	YP10001130	Plug		
CT01	1	DF16273050	Film Cap., 0.027µF ±10%	C001	1	DK17103010	Ceramic Cap., 0.01µF ±20%		
CT02	1	DF 16273050	Film Cap., 0.027µF ±10%	C002	1	DK17103010			
CT03	i	DD16121010		C004	1	EA47601090			
CT04	1	DD16121010		C006	1	DK18403020			
JT01	1	YP10001130	Plug	F001	1	FS10160800	Fuse, 1.6A 250V SEMKO		
JT02	1	YP10001130	Plug						
JT03	1	YP10001130	Plug	F003	1	FS10250800	Fuse, 2.5A 250V SEMKO		
JT04	1	YP10001130	Plug	F004	1	FS10250800			
JT05	1	YP10001130	Plug	F005	1	FS10315800	Fuse, 3.15A 250V SEMKO		
JT06	1	YP10001130	Plug	J001	1	YT01040150			
				J002	1	YL01020030 YT02010090			
JT07	1	YP10001130		J003 J004	1 1	YT02040080			
JT08	1	YP10001130		J004	1	YT02040080			
JT09	1	YP10001130	_	J005	1	YT01010050			
JT10	1	YP10001130		J006 J007	1	YJ01000980	Jack		
JT11	1	YP10001130	1 1 4/100	3007	'	1301000300			
RT01	1	RT05153140	Resistor 15KΩ ±5% ¼W	J008	1	YT03040060	Terminal		
RT02	1	RT05153140		J009	1	YT03040060			
RT03	1	RT05683140		J010	1 1	YJ08000190	Jack		
RT04	1	RT05683140		J012	1	YJ08000220	Jack		
RT05	1	RC00000120	Resistor 0Ω	J013	1	BY03110010			
D.T.O.C		D 000000130	Resistor 0Ω	J014	1	YP04000560			
RT06	1	RC00000120 SP02020080	Push Switch	J015	1	YT01010050	Terminal		
ST01	1	SP02020060	I dan Switch	J017	1	YJ08000090	Jack		
	İ		PZ01 DIAL LAMP BOARD	J018	1	YJ08000090	Jack		
PZ01	1	YD28860160		J019	1	YJ08000090	Jack		
F201	i	ZZ28891160					·		
1	'	2220031100	, , , , , , , , , , , , , , , , , , , ,	L001	1	LC11540040	Choke Coil		
JZ01	1	YJ08000170	Jack	L002	1	LF11200480			
JZ02	l i	YJ08000170		L003	1	LS18603030			
JZ03	1	YJ08000170		L004	1	LC13320020	1		
JZ04	1	YJ08000170		M001	1	IN10080340			
JZ05	1	YJ08000170	Jack	M003	1	IN10080430			
JZ06	1	YJ08000170	Jack	M004		IM11042380	1		
JZ07	1	YJ08000170		R001	1	GF05102120	1		
JZ08	1	YJ08000170		R002	1	GF05151120 GF05151120			
JZ09	1	YJ08000170		R003	, 1	GP05151120	Resistor 150 Ω ±5% ½W		
JZ10	1	YJ08000170	Jack	B004	· 1	GJ05331010	Resistor 330Ω ±5% 1W		
				R004		GJ05331010			
JZ12	1	YP10001130		R006	1	RM0254022			
JZ13	1	YP10001130	1	R007		RX05040030			
JZ14	1	YP10001130		R009		GF05510120			
MZ01		IN10080070		S001	1	}			
MZ02		IN10080070		5002	1		·		
MZ03		IN10080070		5003	1				
MZ04		IN10080070 IN10080070		W001	i	ZC01803020	A.C. Power Cord AC Cord		
			PR01 FUSE BOARD						
PR01	1	YD2975001 ZZ29750010	P.W. Board P.W. Board Assembly						
FR01	1 1	FS10350800	Fuse, 3.5A 250V SEMKO						
FR02		FS10100800							
FR03	3 1.	FS10100800		П					
JR01		YJ08000200		H			•		
JR02		YJ08000200		11					
JR03		YJ08000200							
JR04	4	YJ08000200	1						
JR05		YJ08000200							
JR06		YJ08000200	1	11					
JR07	7 1	YP1000113	0 Plug	11		1	· ·		

AMPLIFIER SECTION RATED POWER OU

AMPLIFIER SECTION						
RATED POWER OUT PER CHANNEL, BOUT POWER BAND TPTAL HARMONIC I LOAD IMPEDANCE	OTH CHANNELS DISTORTION	DRIVEN			40 Hz	z to 20 kHz 0.8% 8Ω
I.M.Distortion (I.H.F. method, 60 Hz Damping Factor	and 7 kHz mixed 4:	1 at rated powe	r output)			
PREAMPLIFIER SECTION						
Input Overload at 1 kl Equivalent Input Noise Dynamic Range	e	overload to equi	valent input n	oise)		2.5μV 9 2 dB
Input Sensitivity Input Impedance						47 kΩ
Frequency Response, Signal-to-Noise Ratio	RIAA					±1 dB
(at rated output	and 7.75 mV input)					
High Level (Aux and Tap Input Sensitivity Input Impedance Frequency Response						\dots 100 k Ω
Signal-to-Noise Ratio					40 Hz to 20	$kHz \pm 0.5 dB$
Output Levels Tape Out (ref. 7.75 m					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	525 mV
Ouput Impedance Tape Out						
FM TUNER SECTION						
Sensitivity Sensitivity (DIN)					1.	5μV (8.7 dBf)
IHF 50 dB Quieting	(mono)				50	μν (17.3 dBf) μν (39.2 dBf)
Quieting Slope (Mono) RF Input for 30 dB (Quieting				2	.2μV (12 dBf)
10µV (25 dBf)						5 5 dB
50µV (39 dBf)						63 dB
Distortion (Mono) at 50 dB Quieting, 10						
at 65 dBf (1000μV), Distortion (Stereo)	1000 Hz					0.4%
at 50 dB Quieting, 10 at 65 dBf ($1000\mu V$), Hum and Noise	000 Hz				· · · · · · · · · · · · · · · · · · ·	0.8%
Stereo						68 dB 55 dB
Frequency Response 30 Hz to 15 kHz						±1.5 dB
Mono Stereo						±2.0 dB

Capture Natio	
at 45 dBf(100μV)4.	
at 65 dBf (1000μV)	
Alternate Channel Selectivity	
Spurious Response Rejection	
Image Response Rejection	
I.F. Rejection (Balanced)	
A.M. Suppression	15 dB
Stereo Separation	
100 Hz	35 dB
1000 Hz	38 dB
10 kHz	30 dB
Subcarrier Rejection	55 dB
AM TUNER SECTION	
IHF Usable Sensitvity	25μV
Distortion (THD), 30% Modulation	0.7%
Signal-to-Noise Ratio	
Frequency Response (±3 dB)	
Alternate Channel Selectivity	
Image Rejection	
Spurious Response Rejection	
I.F. Rejection	
GENERAL	
Power Requirements	50 Hz
(This unit can be converted by a qualified technician to operate on 110/120/240 V ~, 50/6	
Power consumption at rated output, both channels operating (8 Ω loads)	
Idling power (volume control at zero)	
Dimensions	
Panel Width	nches
Panel Height	
Depth	
Weight	
Unit alone	3 lbs
Packed for shipment	
I would be displayed the state of the state	

VOLTAGE CONVERSION

This Model is equipped with a universal power transformer to permit operation at 110, 120, 220 and 240 V AC 50/60 Hz.

To convert the unit to the required voltage, set the plug as illustrated so that you can adjust the voltage as required.

CAUTION: DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CON-VERTING VOLTAGE.

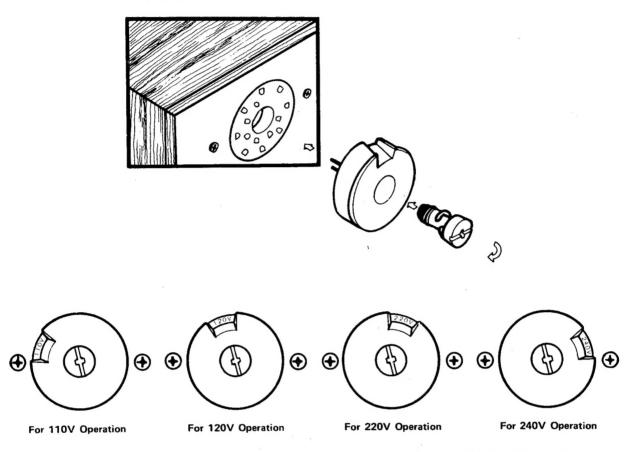


Figure 25, Voltage Conversion Chart

Instruction for the use in the range other than specified in FTZ codes

Achtung für die Leute, die in dem Gebiet wohnen, wo die FTZ-Bestimmungen vorherrschend sind.

Sollte das Gerät auch für Frequenzen auszerhalb des in den FTZ-Bestimmungen angegebenen Bereiches empfangebereit sein, bitten wir, den Bereich durch Nachstellen des Kernes in der Oszillatorspule (in der Abbildung mit "FTZ" gekennzeichnet) so zu korrigieren, dass er den Bestimmungen entspricht.

